

Remarks

Claims 1-6, 9-19, and 22-32 are pending in the present application and are rejected.

Claims 1, 16, and 28 are amended to include the limitation, "wherein the photocurable composition includes less than about 10 weight percent volatile organic compounds."

New claim 33 is present for examination. This claim incorporates the limitations of claim 12 which is apparently allowable but for the double patenting rejection.

Claim Rejections Under 35 U.S.C. § 103

Claims 1-6, 9-11, 13-19 and 22-32 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Shustack, U.S. Patent No. 5,128,387 in view of Shaw et al., U.S. Patent No. 5,440,446.

Applicant respectfully asserts that the Examiner has improperly combined Shustack and Shaw et al. in rejected claims 1-6, 9-11, 13-19 and 22-32. The present invention is directed to photocurable compositions that cure by exposure light to form a dielectric layer. Advantageously, the compositions of the present invention do not contain significant levels of volatile organic compounds. Claims 1, 16, and 28 are amended to make this clear. Shaw et al. is an inappropriate reference to combine with Shustack because Shaw et al. discloses compositions that are only applied by flash evaporation. This is a very difference process than employed in the present invention. Regarding Shaw et al., the Examiner provides the following motivation to combine:

Shaw et al. provides motivation by teaching that diethylene glycol diacrylate is one of ten diacrylates that can be included in the composition in column 8, lines 6-32. Shaw et al. provides

additional motivation by teaching that diethylene glycol diacrylate can be used in combination with a higher viscosity amine acrylate to provide a mixture for flash evaporation, condensation and curing on the metal substrate (column 8, line 50, to column 9, line 36).

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This stated motivation cannot be applicable to the present application since the compositions of Shaw et al. are strictly for flash evaporation and not for photocuring as in the present application. Moreover, Applicant has amended independent claims 1, 16, and 28 to limit the amount of volatile organic compounds. The present amendment further clarifies the differences between Shaw et al. and the present application since evaporation is undesirable in processes that cure strictly by photocuring.

Regarding Shustack, the Examiner states that the motivation to combine is: Shustack provides motivation by teaching compositions comprising monomers homologous to diethylene glycol diacrylate, such as tripropylene glycol diacrylate or tetraethylene glycol diacrylate in combination with the disclosed acrylated urethane oligomers.

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In reality, there is no motivation provided in Shustack. Shustack fails to disclose the monomer used in the present invention. Clearly, this monomer was known at the time the Shustack application was filed. Moreover, there is certainly no motivation to combine the photocurable compositions of Shustack with the flash evaporator compositions of Shaw et al. (a very different process). The Examiner's acknowledgment that Shaw et al. does not disclose compositions that use a photoinitiator verify the differing nature between Shaw et al. and the present invention.

Accordingly, for at least these reasons, 1-6, 9-11, 13-19 and 22-32 are patentable under 35 U.S.C. § 103(a) as over Shustack in view of Shaw et.

Double Patenting Rejection

Claims 1-6, 9-19 and 22-32 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13, 15-25 and 27-30 of co-pending Application Serial No. 10/703,938.

Upon indication of allowable subject matter but for the double patenting rejection, Applicant will execute a suitable Terminal Disclaimer.


Conclusion

Applicant has made a genuine effort to respond to each of the Examiner's objections and rejections in advancing the prosecution of this case. Applicant believes that all formal and substantive requirements for patentability have been met and that this case is in condition for allowance, which action is respectfully requested. If any additional issues need to be resolved, the Examiner is invited to contact the undersigned at his earliest convenience.

A check in the amount of \$160.00 is enclosed to cover the Petition fee of \$60.00 and the additional claims filing fee of \$100.00. Please charge any additional fees or credit any overpayments as a result of the filing of this paper to our Deposit Account No. 02-3978.

Respectfully submitted,

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